Product Data

# Perfecto HPT 32

Gas turbine lubricant

## Description

Castrol Perfecto HPT 32 is based upon highly refined mineral oils, selected for their inherent high oxidation stability and resistance to sludge formation, further reinforced by oxidation inhibitors chosen to give maximum protection at high temperatures. This high oxidation stability ensures long oil life and minimizes deposit formation and lacquering within the turbine lubrication system.

## Application

Castrol Perfecto HPT 32 is a high performance turbine oil, specifically developed for Industrial gas turbines where the lubricant is likely to be exposed to very high local temperatures. Castrol Perfecto HPT 32 also possess the good water and air separation properties and resistance to foaming which is required for the lubrication of steam turbines, making it the preferred choice for Combined Cycle generating systems where the steam and gas turbines share a common oil supply.

Castrol Perfecto HPT 32 complies with or exceeds the following standards and specifications:

- British Standard BS 489
- Deutsch Industrie Normen DIN 51515
- Alstom HTGD 90117
- General Electric GEK 32568G
- Siemens TLV 9013 04
- Siemens Westinghouse 55125Z3

## Features and Benefits

- Excellent thermal stability leads to long oil life.
- Suitable for the lubrication of steam as well as gas turbines, allowing the use of one oil for Combined Cycle generating systems
- Compatible with all paints, seals and metals commonly used in turbine lubrication systems ensuring that there is no need to change seals or components when changing to this oil

## Technical Data

| Name | Method | Units | Perfecto HPT 32 |
|---|---|---|---|
| Kinematic Viscosity at 40°C | ISO 3104 / ASTM D445 | cSt | 32 |
| Kinematic Viscosity at 100°C | ISO 3104 / ASTM D445 | cSt | 5.3 |
| Viscosity Index | ISO 2909 / ASTM D2270 | - | >100 |
| Relative Density at 20°C | ISO 12185 / ASTM D4052 | g/ml | 0.865 |
| Pour Point | ISO 3016 / ASTM D97 | °C | -18 |
| Closed Flash Point | IP34 / ASTM D93 | °C | 205 |
| Neutralization Number | IP139 / ASTM D974 | mgKOH/g | 0.10 |
| Air Release Value at 50°C | ISO 9120 / ASTM D3427 | mins | 3 |
| Water Separation | ASTM D1401 | mins | 10 |
| Demulsification Number | IP19 | secs | 60 |
| Foaming Properties, Sequence 1, 24°C | ISO 6247 / ASTM D892 | ml | 10/0 max |
| Foaming Properties, Sequence 2, 93.5°C | ISO 6247 / ASTM D892 | ml | 20/0 max |
| Foaming Properties, Sequence 3, 24°C | ISO 6247 / ASTM D892 | ml | 10/0 max |
| Rust Prevention Sea Water | ISO 7210 / ASTM D665B | - | Pass |
| Copper Corrosion, 3hrs at 100°C | ISO 2160 / ASTM D130 | - | Class 1 |
| TOST, to 2.0mgKOH/g | IP157 / ASTM D943 | hours | >5000 |
| RPVOT | IP229 / ASTM D2272 | mins | 2000 |

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

## Care and Handling

Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

## Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 600C, exposed to hot sun or freezing conditions.


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